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# Central Internet Database:

## User Interface

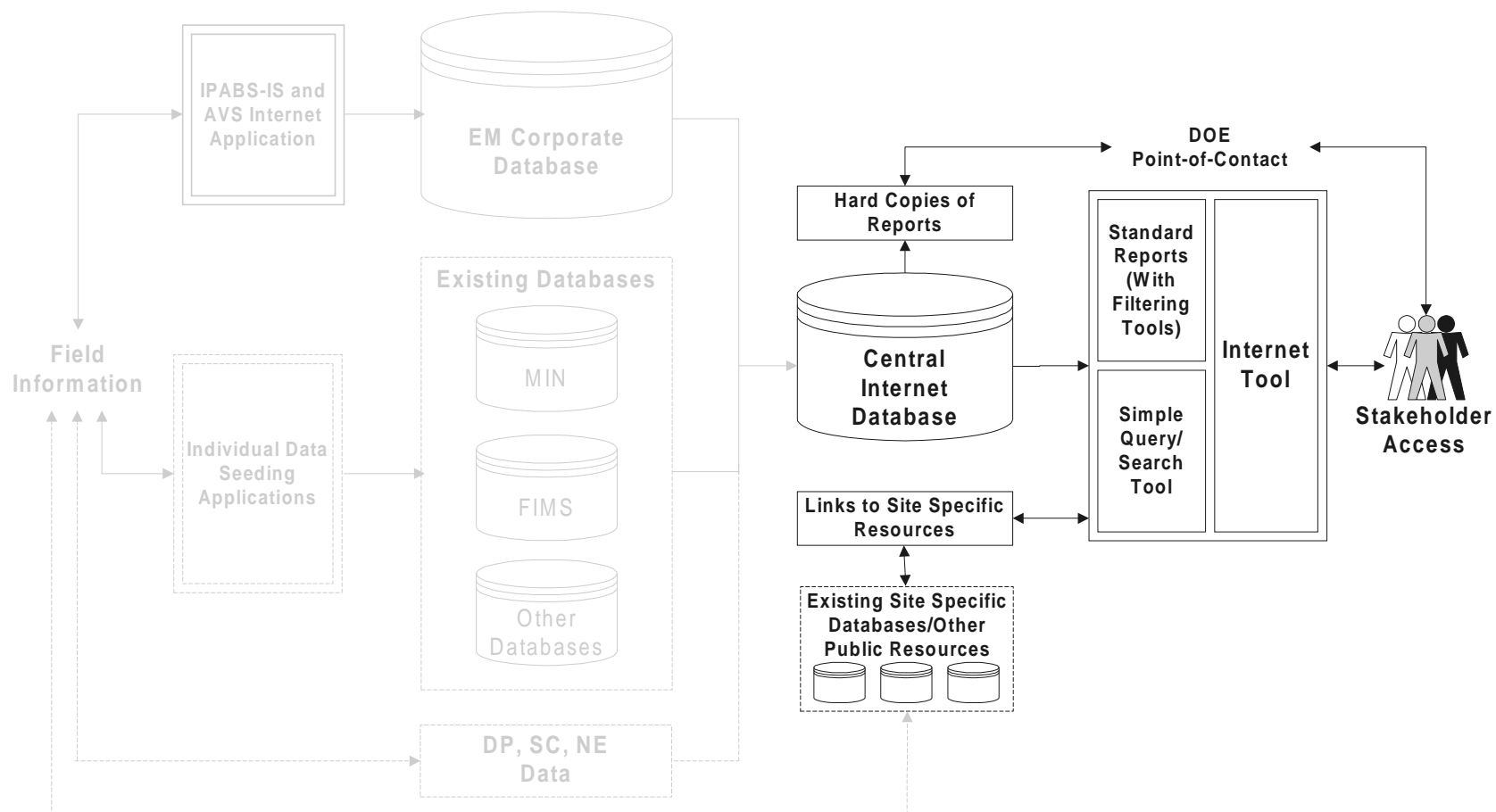
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National Stakeholder Forum  
Columbia, MD  
June 3-4, 1999



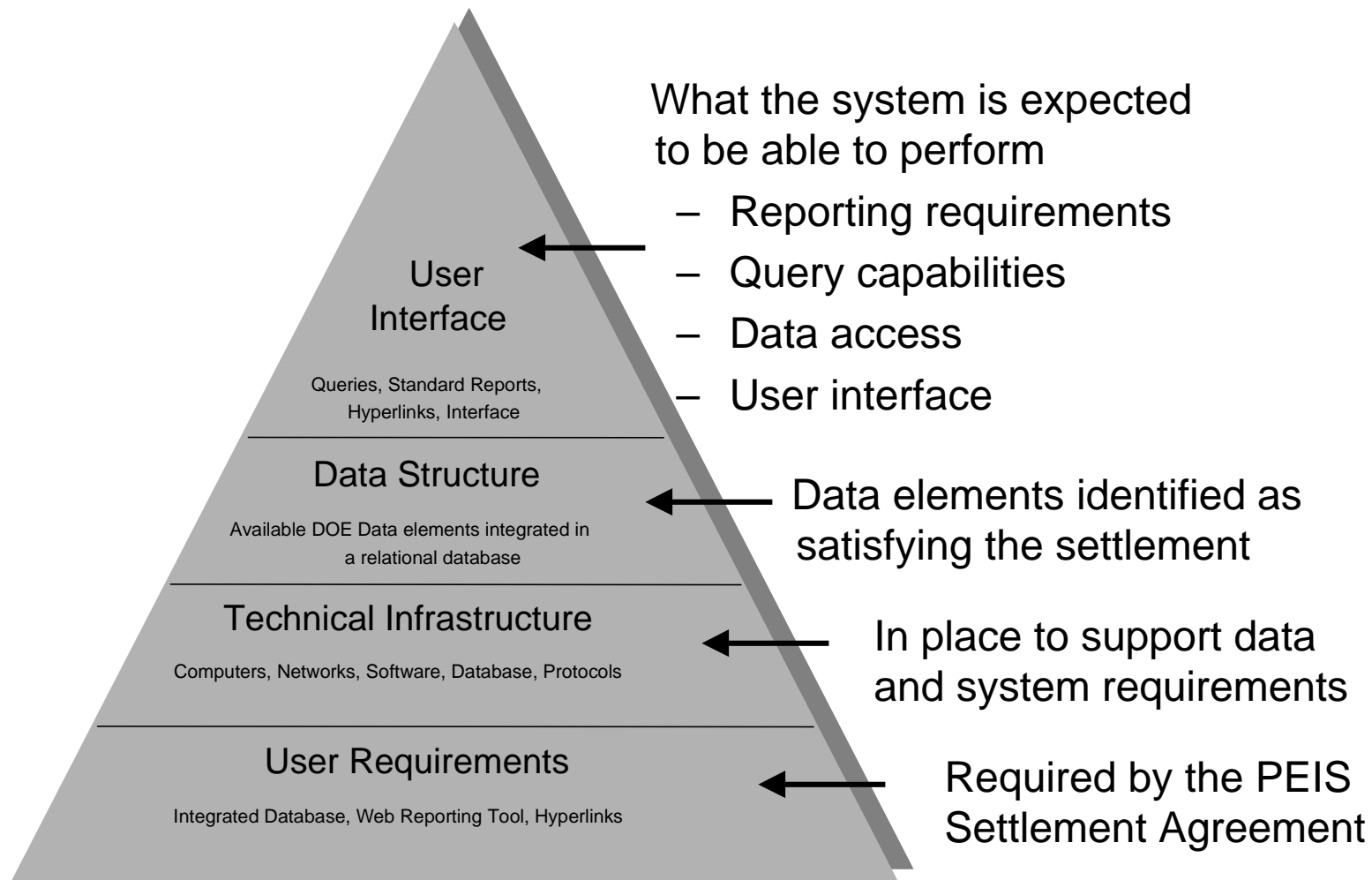
**Presented by Jim Werner**  
Friday, June 4, 1999

# User Interface Overview



# Central Internet Database: System Requirements

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# General Content of User Interface

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- The Central Internet Database (CID) will operate as a WWW site
- Criteria for good web pages:
  - Organized the way people think
  - Allow users to get access to data
  - Allow users to understand of data
- Basics of user-friendliness:
  - Well structured, “content-rich” (not just chart clutter)
  - Compatible with systems most people use
  - Good integration of graphics and text

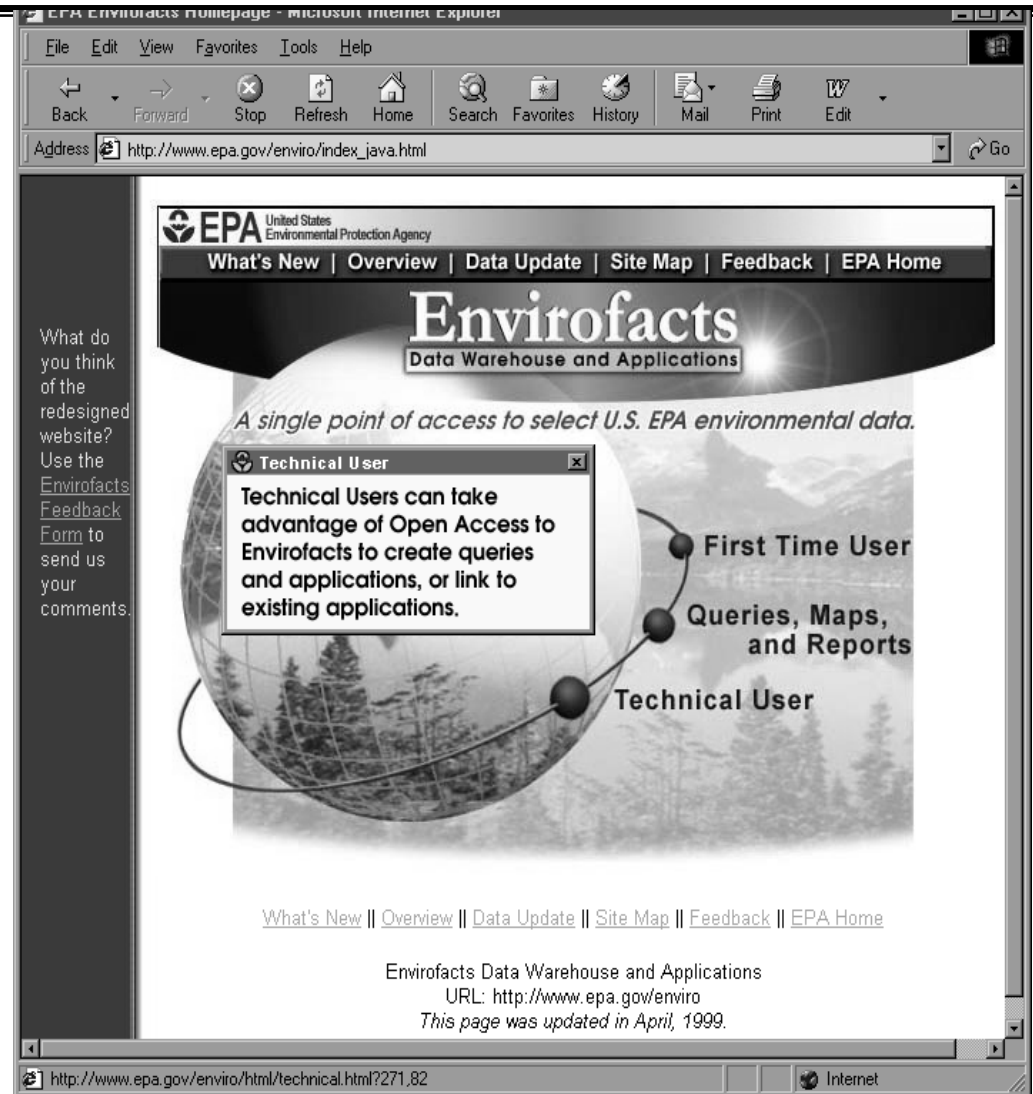
# Key Parts of a User Interface

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- How a web site looks
  - Home page
  - Navigation
  - Site Map
  - Site Index
- How a web site works
  - Searches
  - Query
  - Results

# How A Web Site Looks: Home Page

- Purposes:
  - Quickly orient user to web site content
  - Summary of the purpose of the web site
- EPA's "Envirofacts"
  - Several options up front
  - Easy for user to understand functions of the site



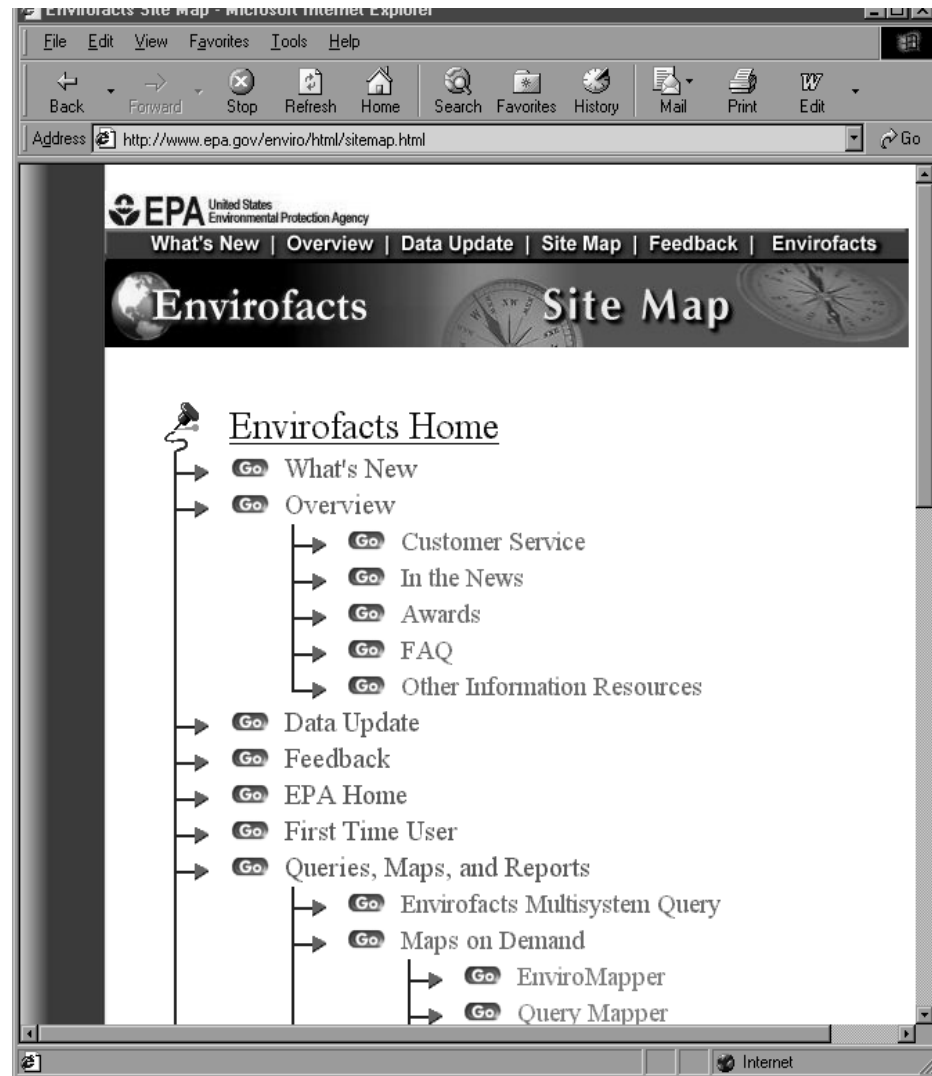
# How A Web Site Looks: Navigation

- Navigation within the site must be easy and logical



# How A Web Site Looks: Site Map

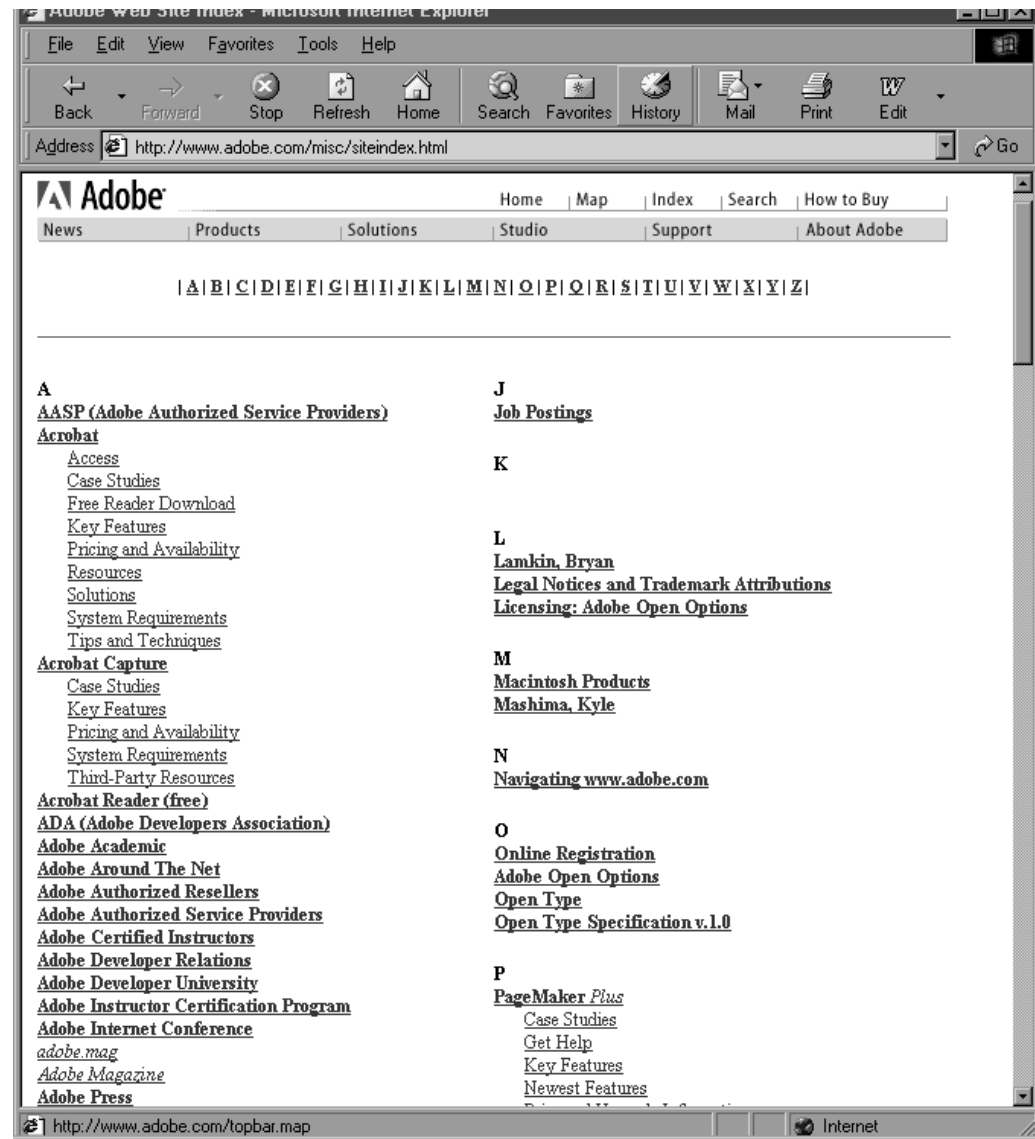
- Provides a means for quickly viewing major content categories of a site using text and images
- Can quickly orient the user to what information is available
- EPA's "Envirofacts"
  - Organized in a logical manner
  - Shows site structure





# How A Web Site Looks: The Site Index

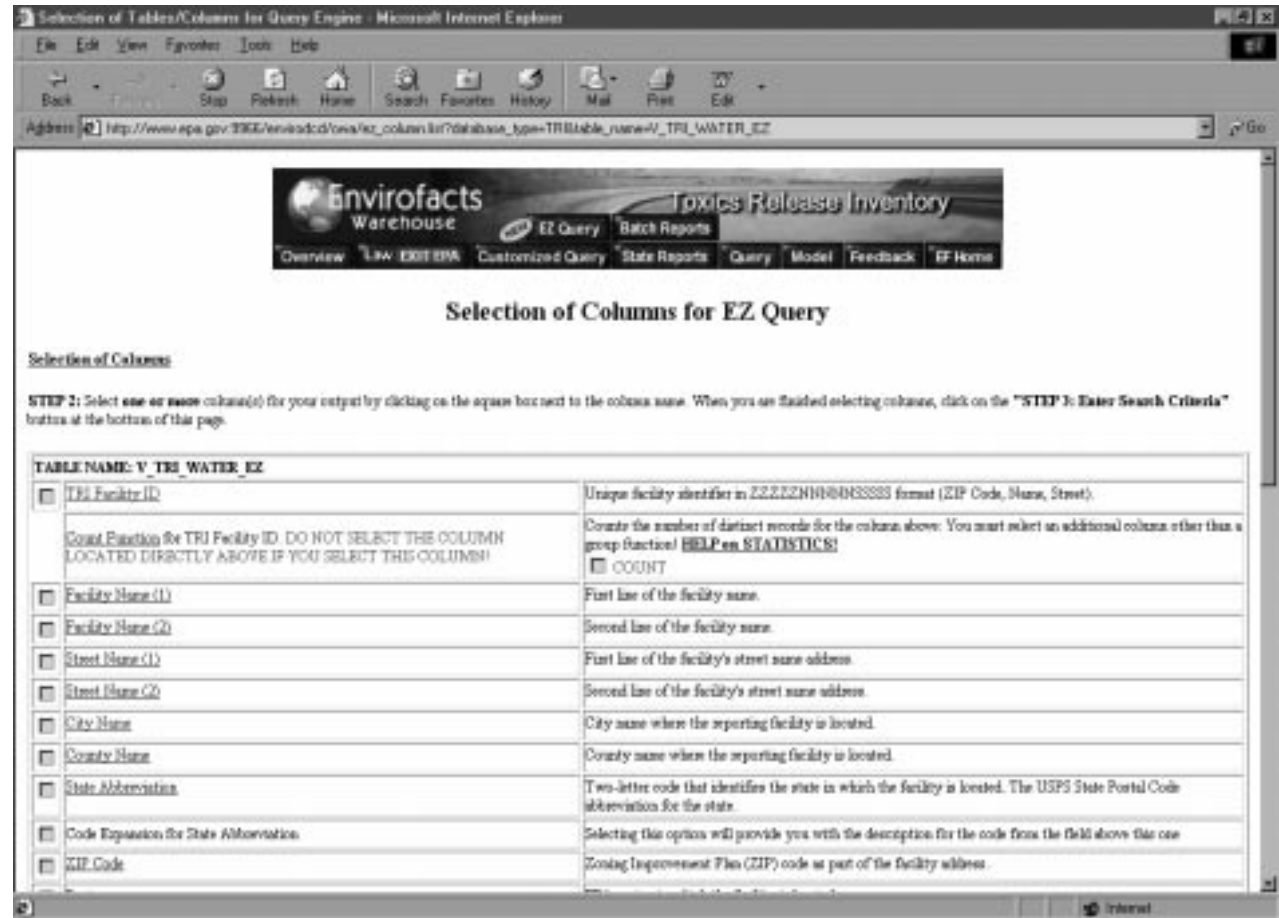
- Similar to alphabetical indices found at the back of books
- Adobe's site provides a very comprehensive look at what is contained in their site
- Allows a user to find a specific section of the web site without "surfing"



# How A Web Site Works: Query

## Check boxes

- Check boxes will allow the user to define the organization and content to be retrieved from the database
- Easy to design queries to user specifications
- Description column is useful



Selection of Columns for EZ Query

STEP 2: Select one or more column(s) for your output by clicking on the square box next to the column name. When you are finished selecting columns, click on the "STEP 3: Enter Search Criteria" button at the bottom of this page.

TABLE NAME: V_TRI_WATER_EZ	
<input type="checkbox"/> TRI Facility ID	Unique facility identifier in ZZZZZNNNNNNNNNN format (ZIP Code, Name, Street).
Count Function for TRI Facility ID. DO NOT SELECT THE COLUMN LOCATED DIRECTLY ABOVE IF YOU SELECT THIS COLUMN!	
<input type="checkbox"/> COUNT	Counts the number of distinct records for the column above. You must select an additional column other than a group function! <a href="#">HELP on STATISTICS!</a>
<input type="checkbox"/> Facility Name (1)	First line of the facility name.
<input type="checkbox"/> Facility Name (2)	Second line of the facility name.
<input type="checkbox"/> Street Name (1)	First line of the facility's street name address.
<input type="checkbox"/> Street Name (2)	Second line of the facility's street name address.
<input type="checkbox"/> City Name	City name where the reporting facility is located.
<input type="checkbox"/> County Name	County name where the reporting facility is located.
<input type="checkbox"/> State Abbreviation	Two-letter code that identifies the state in which the facility is located. The USPS State Postal Code abbreviation for the state.
<input type="checkbox"/> Code Expansion for State Abbreviation	Selecting this option will provide you with the description for the code from the field above this one.
<input type="checkbox"/> ZIP Code	Zoning Improvement Plan (ZIP) code as part of the facility address.

# How A Web Site Works: The Query

## Pick Lists

- Pick lists allow the user to define data organization and content
- Allows for several variations in the query and resulting report
- Easy to use

Query Form for EZ Query

STEP 3: Enter Search Criteria and Organize the Output

Output Options for Selected Columns

Column Name	Search Option Help!	Search Value	Column Display Order	Sort Column	Sort Order	Where Only
TRI Facility ID	Equal to		<input type="checkbox"/>	<input type="checkbox"/>	Ascending	<input type="checkbox"/>
Facility Name (1)	Equal to		<input type="checkbox"/>	<input type="checkbox"/>	Ascending	<input type="checkbox"/>
Facility Name (2)	Not Equal to		<input type="checkbox"/>	<input type="checkbox"/>	Ascending	<input type="checkbox"/>
City Name	Beginning with		<input type="checkbox"/>	<input type="checkbox"/>	Ascending	<input type="checkbox"/>
Region	Less than/Equal to		<input type="checkbox"/>	<input type="checkbox"/>	Ascending	<input type="checkbox"/>
Primary SIC Code	Greater than/Equal to		<input type="checkbox"/>	<input type="checkbox"/>	Ascending	<input type="checkbox"/>
Assigned DUNS Number	Less than		<input type="checkbox"/>	<input type="checkbox"/>	Ascending	<input type="checkbox"/>
Facility ID	Greater than		<input type="checkbox"/>	<input type="checkbox"/>	Ascending	<input type="checkbox"/>
Federal Ownership Flag	Containing		<input type="checkbox"/>	<input type="checkbox"/>	Ascending	<input type="checkbox"/>
Release Estimate Basis Code	In		<input type="checkbox"/>	<input type="checkbox"/>	Ascending	<input type="checkbox"/>
Trade Secret Indicator	Not In		<input type="checkbox"/>	<input type="checkbox"/>	Ascending	<input type="checkbox"/>
	Equal to		<input type="checkbox"/>	<input type="checkbox"/>	Ascending	<input type="checkbox"/>
	Equal to		<input type="checkbox"/>	<input type="checkbox"/>	Ascending	<input type="checkbox"/>
	Equal to		<input type="checkbox"/>	<input type="checkbox"/>	Ascending	<input type="checkbox"/>
	Equal to	1. List All Release Estimate Basis Code(s)	<input type="checkbox"/>	<input type="checkbox"/>	Ascending	<input type="checkbox"/>
	Equal to		<input type="checkbox"/>	<input type="checkbox"/>	Ascending	<input type="checkbox"/>
	Equal to		<input type="checkbox"/>	<input type="checkbox"/>	Ascending	<input type="checkbox"/>

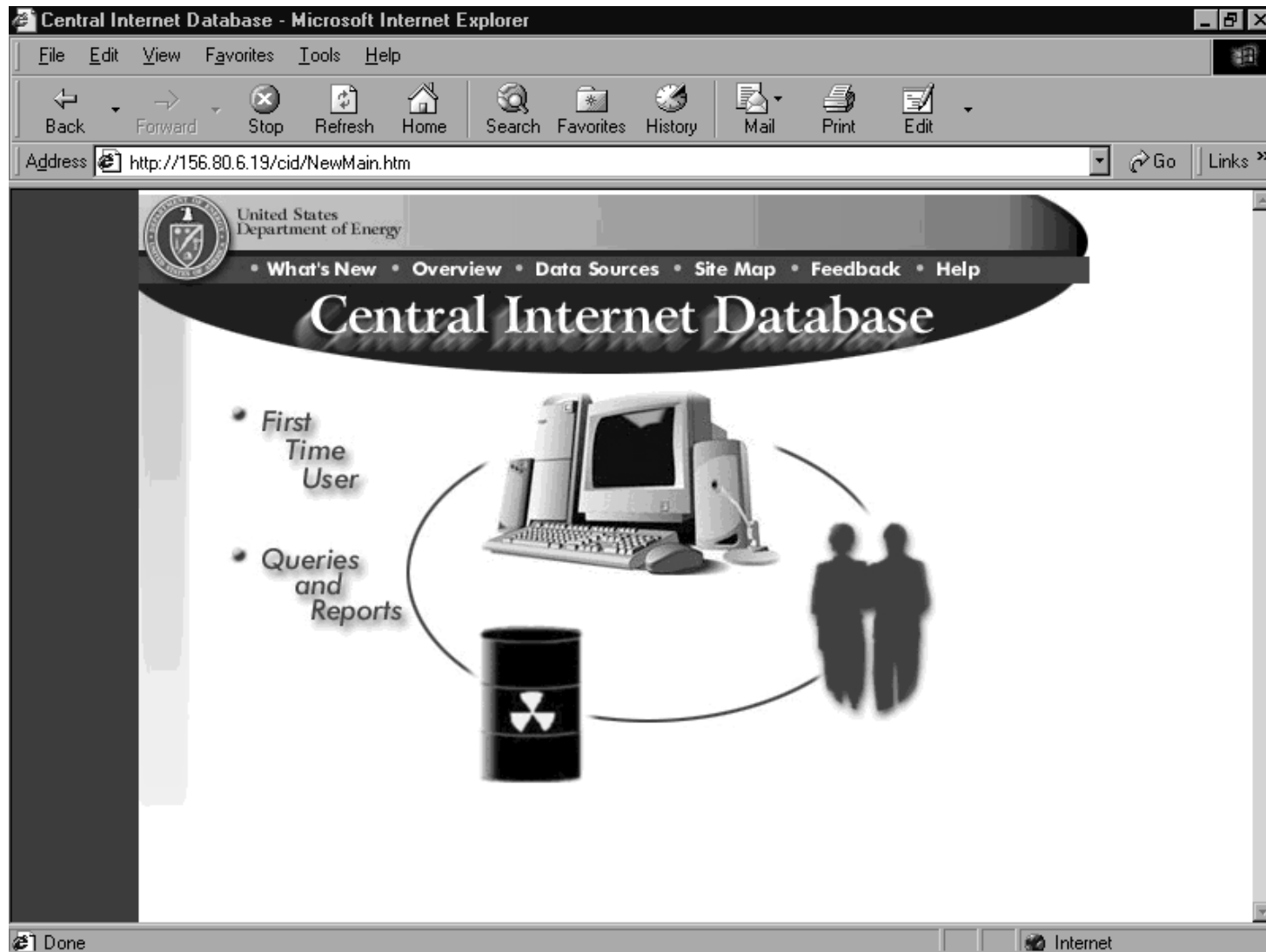
Search Database   Reset   Output to CSV File

# User Interface Discussion Questions

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- How should the user interface look?
  - What information should be on the home page?
  - How should features of the web site be presented?
  - What graphics/text combinations should be available?
- How should the user interface work?
  - How will search features be used?
  - What are important criteria for building queries?
  - What are the key data items for sorting and organizing information?

# Discussion Sample: Home Page



# Discussion Sample: Query Page

The screenshot shows a web browser window with the URL bar displaying "United States Department of Energy". The browser's menu bar includes "File", "Edit", "View", "Favorites", "Tools", and "Help". The page title is "Query Builder". Below the title, there are two instructions: "1. Select the fields you would like to display on your report. You must select at least one field, and you may select as many fields as you would like." and "2. Click *back* to edit the previous screen or *next* to continue." The page is divided into two main sections: "Waste/Media" and "Facilities". Each section contains a list of fields with checkboxes. In the "Waste/Media" section, the following fields are checked: "Waste Type", "DOE Site", "Managing Program", and "Disposition Activity (i.e., treatment, storage, disposal)". In the "Facilities" section, the following fields are checked: "Facility Name".

**Query Builder**

1. Select the fields you would like to display on your report. You must select at least one field, and you may select as many fields as you would like.

2. Click *back* to edit the previous screen or *next* to continue.

**Waste/Media**

<input checked="" type="checkbox"/> Waste Type	<input type="checkbox"/> Waste Volume
<input checked="" type="checkbox"/> DOE Site	<input type="checkbox"/> Generator Program
<input type="checkbox"/> Chemical Constituents	<input checked="" type="checkbox"/> Managing Program
<input type="checkbox"/> Chemical Concentration	<input type="checkbox"/> Managing Site
<input type="checkbox"/> Radionuclides	<input type="checkbox"/> Stream Name
<input type="checkbox"/> Radionuclide Concentration	<input checked="" type="checkbox"/> Disposition Activity (i.e., treatment, storage, disposal)
<input type="checkbox"/> Generator Site	

**Facilities**

<input checked="" type="checkbox"/> Facility Name	<input type="checkbox"/> Facility Size
<input type="checkbox"/> Property ID	<input type="checkbox"/> Hazard Category
<input type="checkbox"/> Property Name	<input type="checkbox"/> Status
<input type="checkbox"/> Facility Location	<input type="checkbox"/> Type
<input type="checkbox"/> Site Name	<input type="checkbox"/> Radionuclides
<input type="checkbox"/> Site Area	<input type="checkbox"/> Chemicals
<input type="checkbox"/> Managing Program	<input type="checkbox"/> Radiation Designation Areas

# Discussion Sample: Query Page

United States Department of Energy

• What's New • Overview • DOE Resources • Site Map • Feedback • Help

## Query Builder

This screen displays the fields you chose in the previous page to filter the results of your report. Now you must select the criteria for these fields.

1. Select a *Relational Operator* (e.g. =, <, >, like), to specify a relation between the data selected in the *Field* column to the *Value* entered on this screen.
2. Select or type in a *Value* that you would like to filter on. Select a value from a select box, or type in a value depending on the *Field*.
3. Select a *Logical Operator* (AND, OR) to restrict the number of records retrieved (AND), or to broaden the number of records retrieved (OR). The *Logical Operator* specifies this relationship between subsequent rows on this screen (i.e. 1 and 2, 2 and 3).
4. Click *back* to edit the previous screen or *next* to continue.

Field	Relational Operator	Value	Logical Operator
1. DOE Site	=	Fernald	AND
2. Waste Type	=	Low Level Waste (LLW)	AND
3. DOE Program			
4. Facility			
5. Disposition Activity			

Note: All date fields must be in mm/dd/yyyy format.